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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/620,527

07/16/2003

James C. Clark

Clark 1-10-9-24-1

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09/22/2006

SYNNESTVEDT & LECHNER, LLP

2600 ARAMARK TOWER

1101 MARKET STREET

PHILADELPHIA, PA 191072950

EXAMINER

LE, DIEU-MINH T

ART UNIT

PAPER NUMBER

2114

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,527

Applicant(s)

CLARK ET AL.

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/20/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to the amendment filed 07/20/2006 in application 10/620,527.
2. Claims 1-30 are again presented for examination.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-30 are rejected under 35 U.S.C. 103 as being unpatentable over Kasper, II et al. (U.S. Publication No. 2004/0057536 hereafter referred to as Kasper) in view of Kanekawa et al. (U.S. Patent 6,513,131 hereafter referred to as Kanekawa).

This rejection is being applied for the same reasons set forth in the previous Office Action mailed 03/20/2006.

As per claims 1-30 see the previous office action for the teaching of Kasper and Kanekawa, as well as the reason and motivation for combined.

Applicant asserts that Kasper and Kanekawa failed to teach or suggest the following:

- a. detecting failures in a system;

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- b. the performance of corrective measures if comparing the samples of operational service measurements with the operational signature indicates the probability of a **silent failure**.

Examiner respectfully transverses Applicant's argument as follows:

- a. First, Examiner would like to bring Applicant attention to Kasper's apparatus and method for **detecting failure** and improving signatures from data stream via determining, comparing and executing processes as depicted in figures 2-3, abstract, col. 1, par. 0004-0006; col. 2, par. 0016; and col. 4, par. 0029. Kasper further explicitly teaches data/signature comparison process/flow via match/mismatch and **detected functionalities in determining failure signature** [col. 2, par. 0016 and col. 6, claim 1]. It is clearly that Kasper explicitly disclosed data/signature failure detection and recovery process via the signature comparison and management as illustrated in figures 2-3. Kasper clearly demonstrated the **applicant's detecting failures in a system** limitation.

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Second, it is not true that Kasper in combining with Kanekawa failed to teach "the detecting failures in a system". Kasper explicitly disclosed the process of comparing operational signatures in supporting the computer processing system having data stream resources with detecting multiple patterns in electronics circuit as illustrated in figures 2-3, abstract, col. 3, par. 0022 and col. 4, par. 0026. In addition, Kanekawa further demonstrated applicant's limitation via its distributed fault tolerant system having data/errors/signature detection/correction and comparison processes [abstract, fig. 22, col. 3, lines 66 through col. 4, lines 25]. Therefore, it is clearly that both Kasper and Kanekawa do teach applicant's invention.

b. First, it is clearly that both Kasper and Kanekawa do teach applicant's invention. Examiner again strongly emphasized functionality of failure/error detection and correction performed via operational signatures as demonstrated with Kasper's detecting and correlating of signatures of communication devices/systems and Kanekawa's logic circuit error detection and correction in supporting the system reliability process therein. Kasper further disclosed the capabilities of obtaining samples of operational service measurements [col. 6,

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claim 1; col. 7, claim 19 and claim 29; col. 2, par. 0016-0017], comparing said samples with said operational signature [col. 1, par. 0008; col. 2, par. 0014-0017], performing a corrective measure if said comparison of said samples with said operational signature [col. 1, par. 0005; col. 2, par. 0014-0017; col. 6, par. 0039].

Second, it is not true that Kasper in combining with Kanekawa failed to teach "the performance of corrective measures if comparing the samples of operational service measurements with the operational signature indicates the probability of a silent failure". This is because Kanekawa explicitly demonstrated the logic circuit error detection and correction in supporting the system reliability process [abstract, fig. 22, col. 1, lines 10-20] comprising silent failure detection in supporting the system reliability process [col. 22, lines 27-58] via signature comparison. Moreover, Kasper clearly illustrated failure/error detection and correction performed via operational signatures [col. 1, par. 0004-0006; col. 2, par. 0016; and col. 4, par. 0029]. Therefore, the combination of both Kasper and Kanekwa's invention do teach applicant's invention.

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Third, as indicated that, it would have been obvious to a person having ordinary skill in the art at the time the invention was made first, to realize that the Kasper's ***detecting failure of electronics devices or communication system via signatures comparison, indexing, measuring probability*** capability does perform such Applicant's detecting silent failures in a system limitation. This is because Kasper clearly applied these pattern signatures for testing configuration, comparison, simulation, evaluation, performance in determining whether the system functioned properly; second, by applying the capability of **silent failure detection in supporting the system reliability process** as taught by Kanekawa in conjunction with the detecting and correlating of signatures of communication devices/systems as taught by Kasper, the computer/communication data processing system, more specifically a silent failure detection system can enhance its operation performance, more specifically to ensuring the error thoroughly detected and corrected via signature comparison process.

Applicant's arguments filed 07/20/2006 have been fully considered but they are not persuasive.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh Le whose telephone number is (571) 272-3660. The examiner can normally be reached on Monday - Thursday from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman, can be reached on (571)272-3644.

The Tech Center 2100 phone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**DIEU-MINH THAI LE
PRIMARY EXAMINER
ART UNIT 2114**

DML
9/17/06